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(54) METHOD OF MANUFACTURING OPTICAL DISK SUBSTRATE

(57) Abstract:

PROBLEM TO BE SOLVED: To solve the problems that it is required for recording a micro mark to make an optical spot micro because a resist conventionally used in a process to manufacture an optical disk substrate had a reactivity almost proportional to the strength distribution of exposure light spot, and even though there is an optical super-resolution technology therefor, a side lobe is formed outside a main spot and the resist is exposed by the side lobe.

SOLUTION: A material having high linear reactivity against a temperature is used as a resist or a mask and a pattern is created with heat generated by absorbing an incident light. A portion in which the temperature becomes not lower than a reaction threshold reacts and a recording pattern can be made smaller.

By combining a sample using such material with the optical super-resolution technology, recording with the side lobe by the optical super-resolution can be suppressed and the size of the optical spot can be reduced.

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